SARS Preparedness and Response Planning

- Overview of SARS outbreak
- Clinical and epidemiologic features of SARS in Toronto
- Control of the Toronto outbreak
- NIH's research program
- FDA's role in anti-viral drugs and vaccine development
- CDC's public health preparedness and response plan





Global Response to SARS, 2003

February 11 -- China reports 305 cases of atypical pneumonia pneumonia with 5 deaths since Nov 16, 2002 in province

Hong Kong

f unusual respiratory disease in patient (index patient) in Hanoi

in Hanoi

i develop similar illness. Similar illness in HCW in HK.

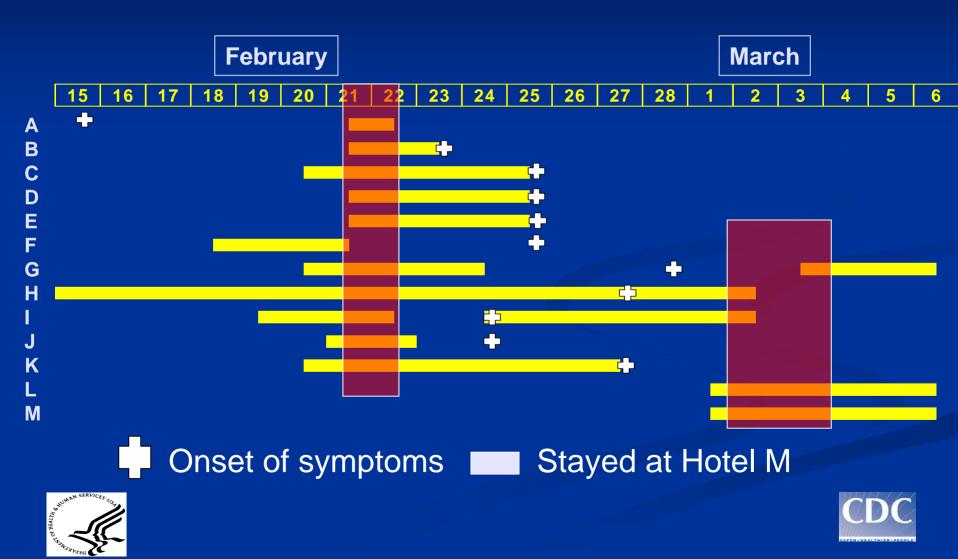
CW in HK.

for SARS

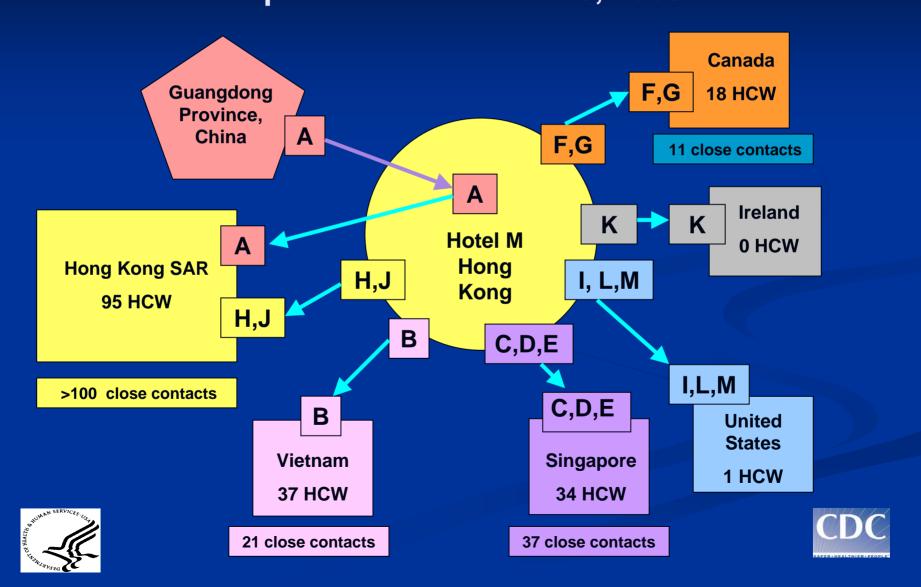


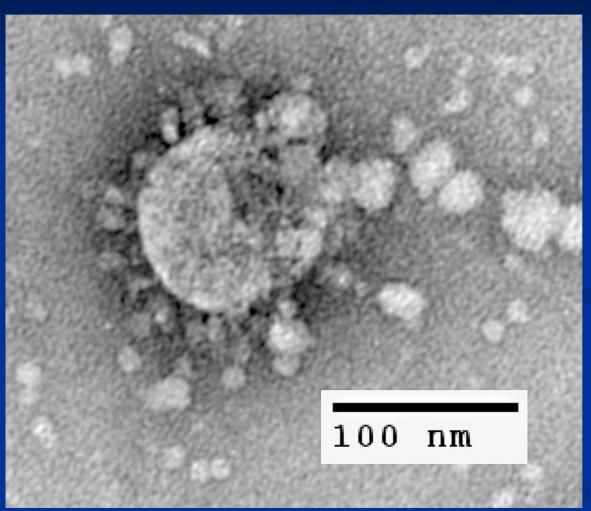


Spread in Hotel M, Hong Kong



Spread from Hotel M Reported as of March 28, 2003





Coronavirus particle in isolation material from SARS patient (Negative Stain EM)





SARS Declared Contained, With No Cases In Past 20 Days

By KEITH BRADSHER

HONG KONG, July 5 — The World Health Organization declared today that SARS had been contained around the world, with no new cases reported to the agency by any country since June 15. But it warned, that the disease could still pose a threat.

The W.H.O. removed the last place on its list of SARS-affected areas, Taiwan. No new cases have been found there for 20 days, a span the agency believes to be twice the disease's incubation period.

SARS, or severe acute respiratory syndrome, has infected 8,439 people in 30 countries on five continents and has killed 812 people. Nearly 200 people with SARS are still being treated in hospitals around the world under strict isolation procedures to prevent them from infecting health-care workers.

Dr. Gro Harlem Brundtland, the W.H.O.'s director general, said close cooperation among health professionals around the world had contained the disease, but cautioned against overconfidence.

Global SARS Outbreak*

Country	Cases	Deaths
China	5327	348
Hong Kong	1755	298
Taiwan	671	84
Canada	250	38
Singapore	206	32
U.S.	75	0
Vietnam	63	5
Philippines	14	2
Other	76	6
Total	8437	813





Future of SARS -- ?

Possible source of SARS CoV

Persistent and/or missed transmission in humans

Original or new animal reservoir

Laboratory exposure

Factors that might affect characteristics of SARS CoV infections

Seasonality

Susceptible population

Change in the virus



